

**TIP PROJECT: R-5024**

STATE OF NORTH CAROLINA  
 DIVISION OF HIGHWAYS  
 PLAN FOR PROPOSED  
 HIGHWAY EROSION CONTROL  
**JACKSON COUNTY**

**LOCATION: SR 1449 (COPE CREEK ROAD) FROM NC 107 (EAST MAIN STREET) TO SR 1710 (EAST COPE CREEK ROAD)**

**TYPE OF WORK: GRADING, PAVING, AND DRAINAGE**

THIS PROJECT CONTAINS EROSION CONTROL MEASURES FOR CLEARING AND GRUBBING PHASE OF CONSTRUCTION.

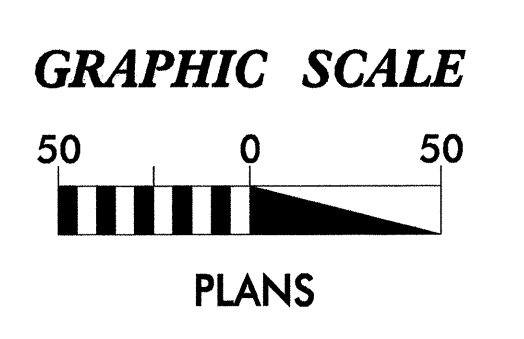
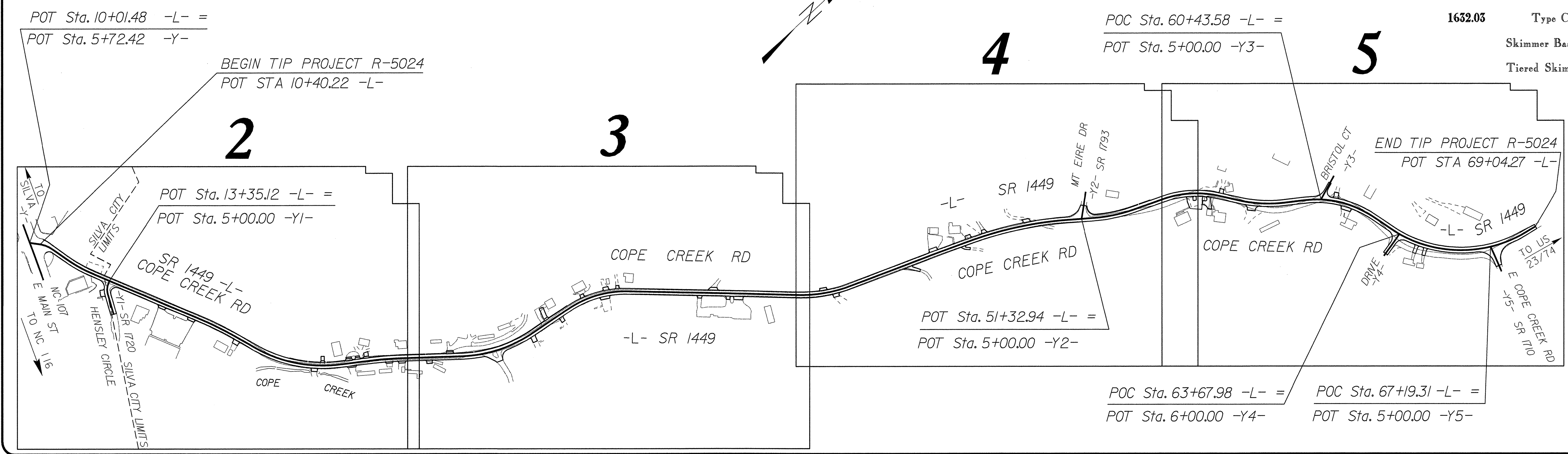
THIS PROJECT HAS BEEN DESIGNED TO SENSITIVE WATERSHED STANDARDS.

ENVIRONMENTALLY SENSITIVE AREA(S) EXIST ON THIS PROJECT  
 Refer To E. C. Special Provisions for Special Considerations.

STATE	STATE PROJECT REFERENCE NO.	SHEET NO.	TOTAL SHEETS
N.C.	R-5024	EC-1	
STATE PROJ. NO.	F.A. PROJ. NO.	DESCRIPTION	
42009.1.1		P.E.	
42009.2.1		RW	
42009.3.1		CONST	

**EROSION AND SEDIMENT CONTROL MEASURES**

Std. #	Description	Symbol
	Streambank Reforestation	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1622.01	Temporary Berms and Slope Drains	
1630.01	Riser Basin	
	Silt Basin Type B	
1633.01	Temporary Rock Silt Check Type-A	
	Temporary Rock Silt Check Type-B	
1634.01	Temporary Rock Sediment Dam Type-A	
1634.02	Temporary Rock Sediment Dam Type-B	
1635.01	Rock Pipe Inlet Sediment Trap Type-A	
1635.02	Rock Pipe Inlet Sediment Trap Type-B	
1630.04	Stilling Basin	
	Rock Inlet Sediment Trap:	
1632.01	Type A	
1632.02	Type B	
1632.03	Type C	
	Skimmer Basin	
	Tiered Skimmer Basin	



ROADSIDE ENVIRONMENTAL UNIT  
 DIVISION OF HIGHWAYS  
 STATE OF NORTH CAROLINA

**DESIGN ENGINEER**

**PLANS REVIEWED AND APPROVED BY TRE DUGAL**  
**WILBUR SMITH ASSOC.**  
 LEVEL IIIA CERT. NO 350

*Richard M. Potempa*  
 7-23-08 P.E.  
 SIGNATURE:

Prepared In the Office of:  
**WILBUR SMITH ASSOCIATES**  
 4135 Mendenhall Oaks Pkwy, Suite 160, High Point, NC 27265

**2006 STANDARD SPECIFICATIONS**

Roadway Standard Drawings

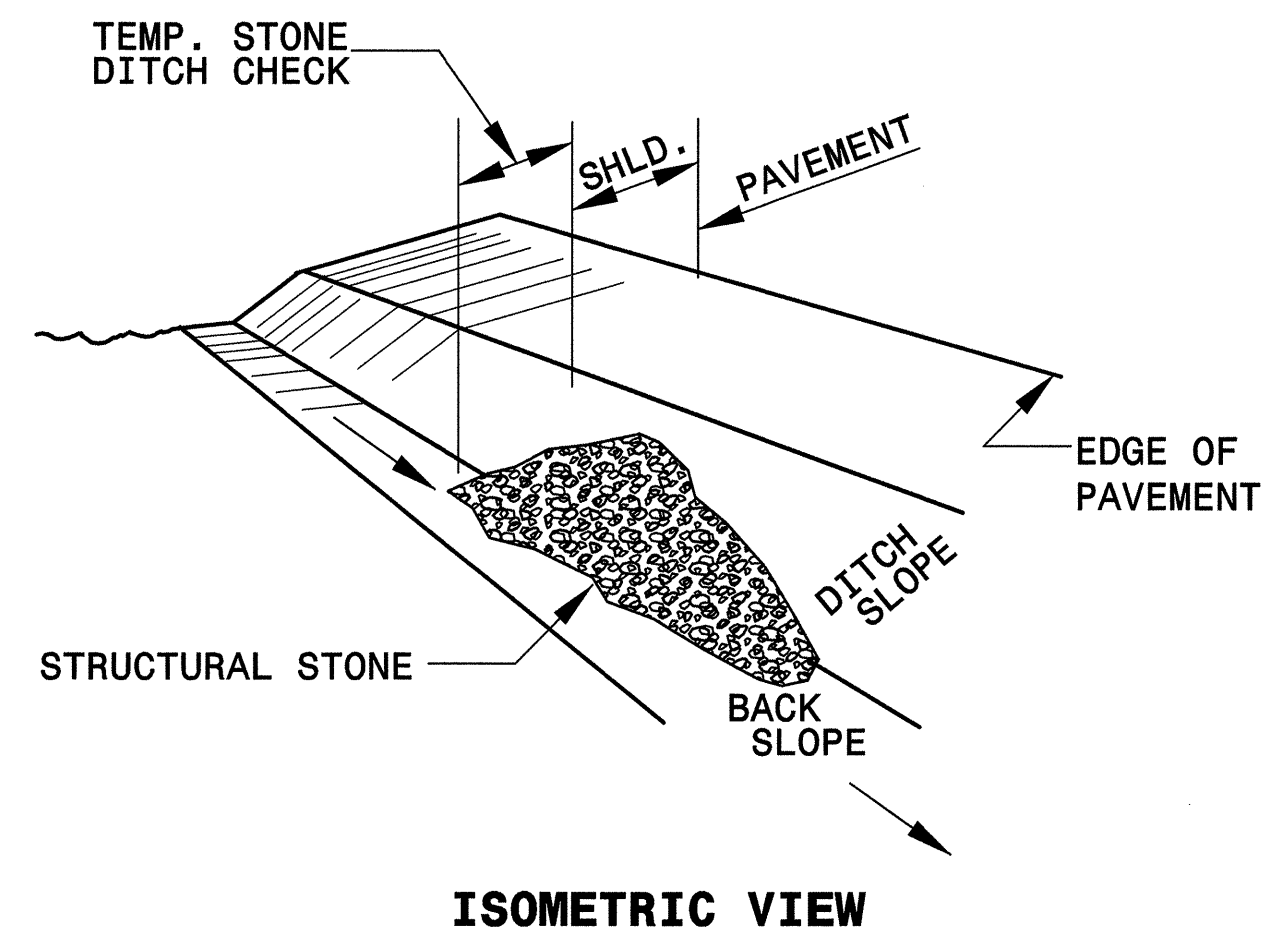
The following roadway English standards as appear in "Roadway Standard Drawings"- Roadway Design Unit - N. C. Department of Transportation - Raleigh, N. C., dated July 18, 2006 and the latest revision thereto are applicable to this project and by reference hereby are considered a part of these plans.

1605.01 Temporary Silt Fence	1632.03 Rock Inlet Sediment Trap Type C
1606.01 Special Sediment Control Fence	1633.01 Temporary Rock Silt Check Type A
1607.01 Gravel Construction Entrance	1634.02 Temporary Rock Sediment Dam Type B
1622.01 Temporary Berms and Slope Drains	1635.02 Rock Pipe Inlet Sediment Trap Type B
1630.03 Temporary Silt Ditch	
1630.05 Temporary Diversion	

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PROJECT REFERENCE NO.	SHEET NO.
R-5024	EC-1A
RW SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER
4135 MENDENHALL OAKS PKWY SUITE 160 WILBUR SMITH ASSOCIATES HIGH POINT, N. C. 27265	

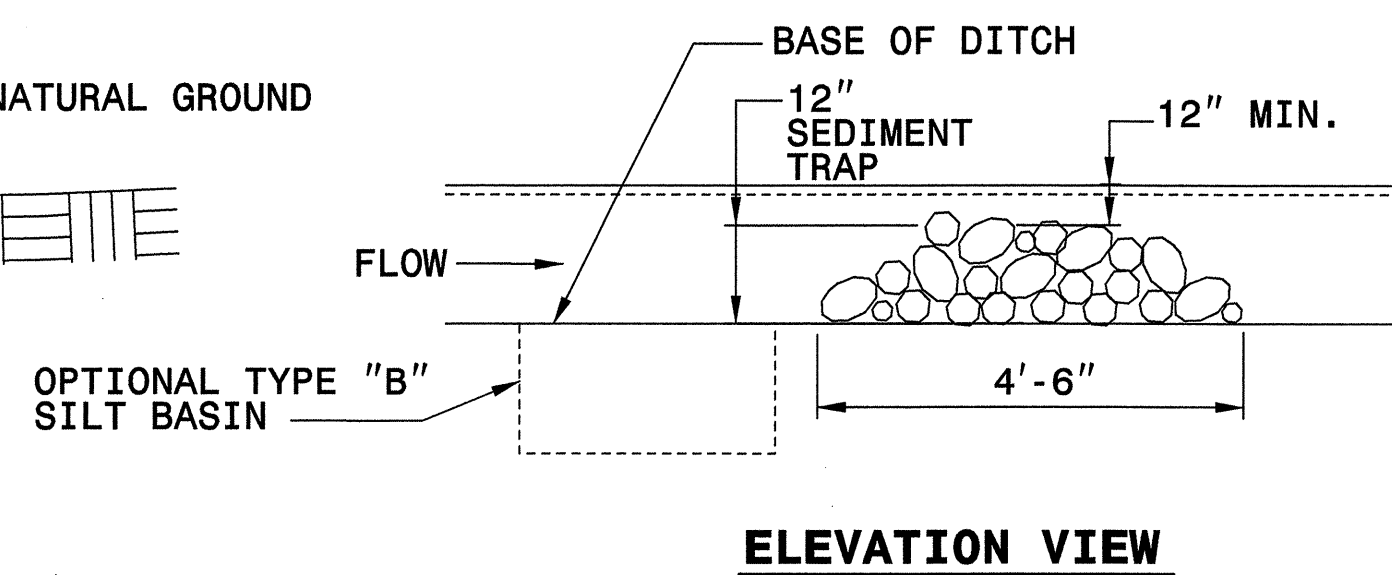
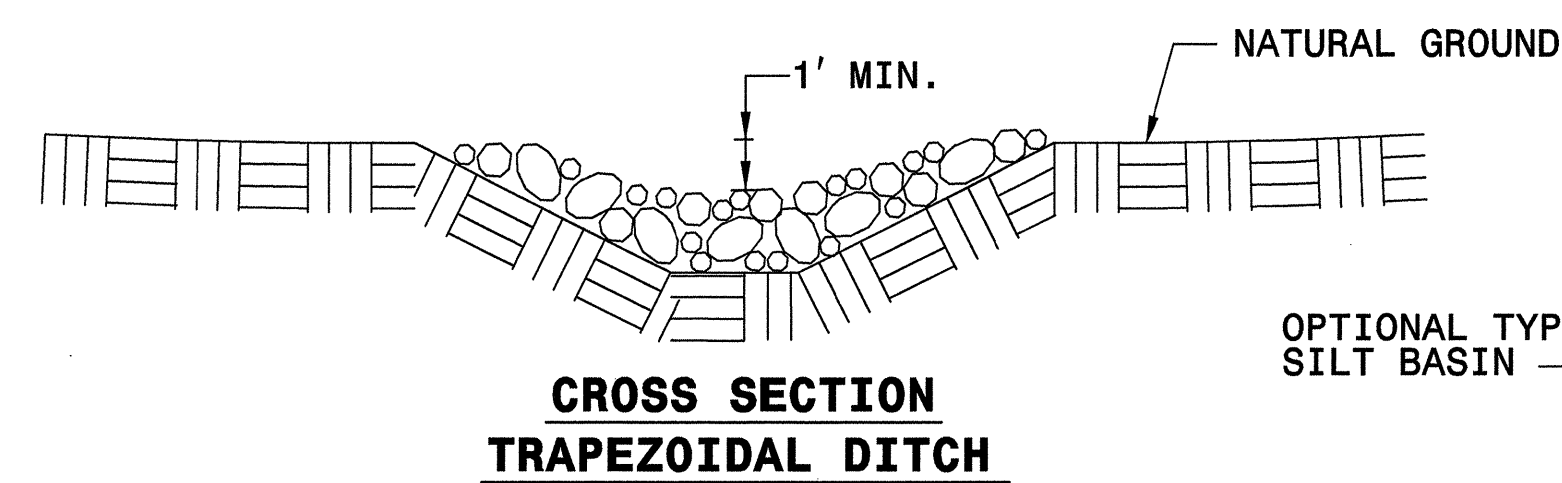
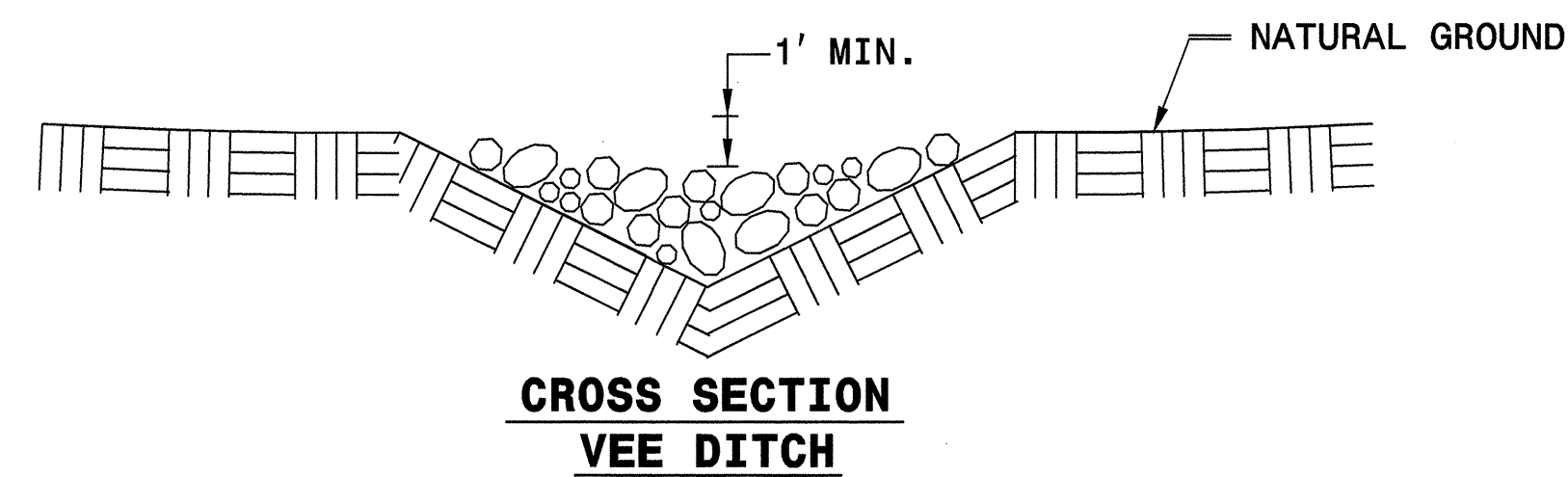
## TEMPORARY ROCK SILT CHECK TYPE 'B' DETAIL



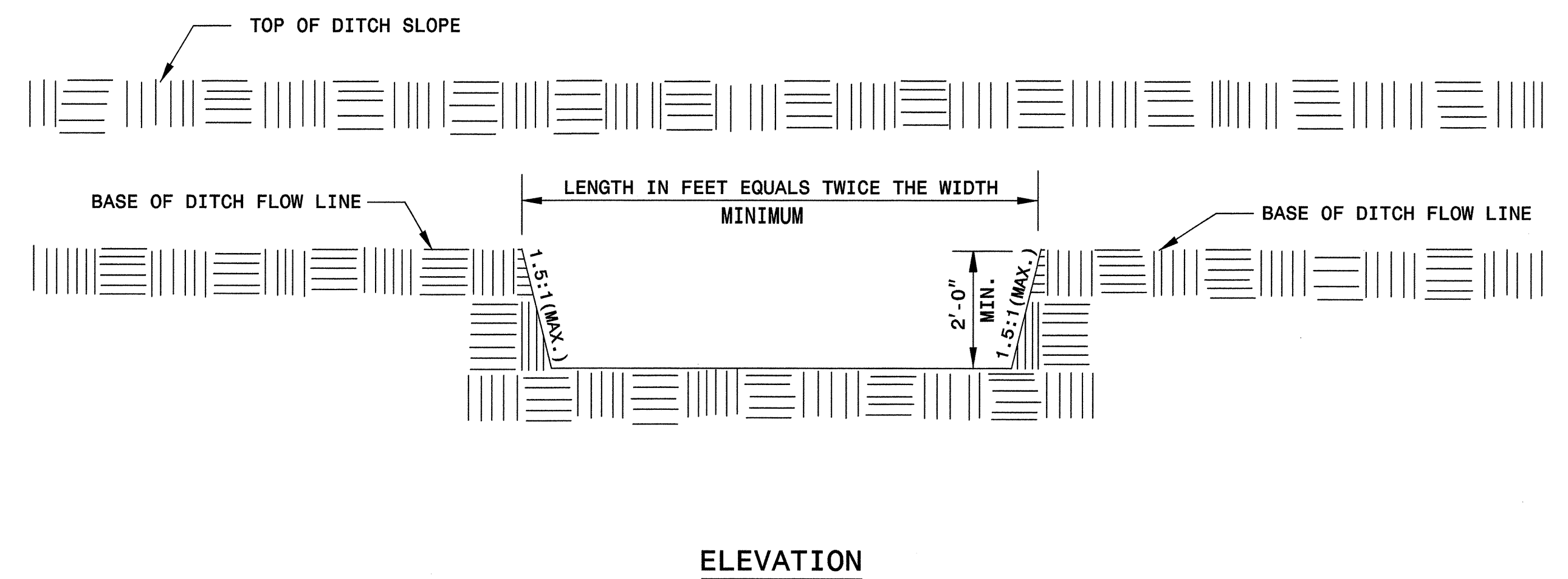
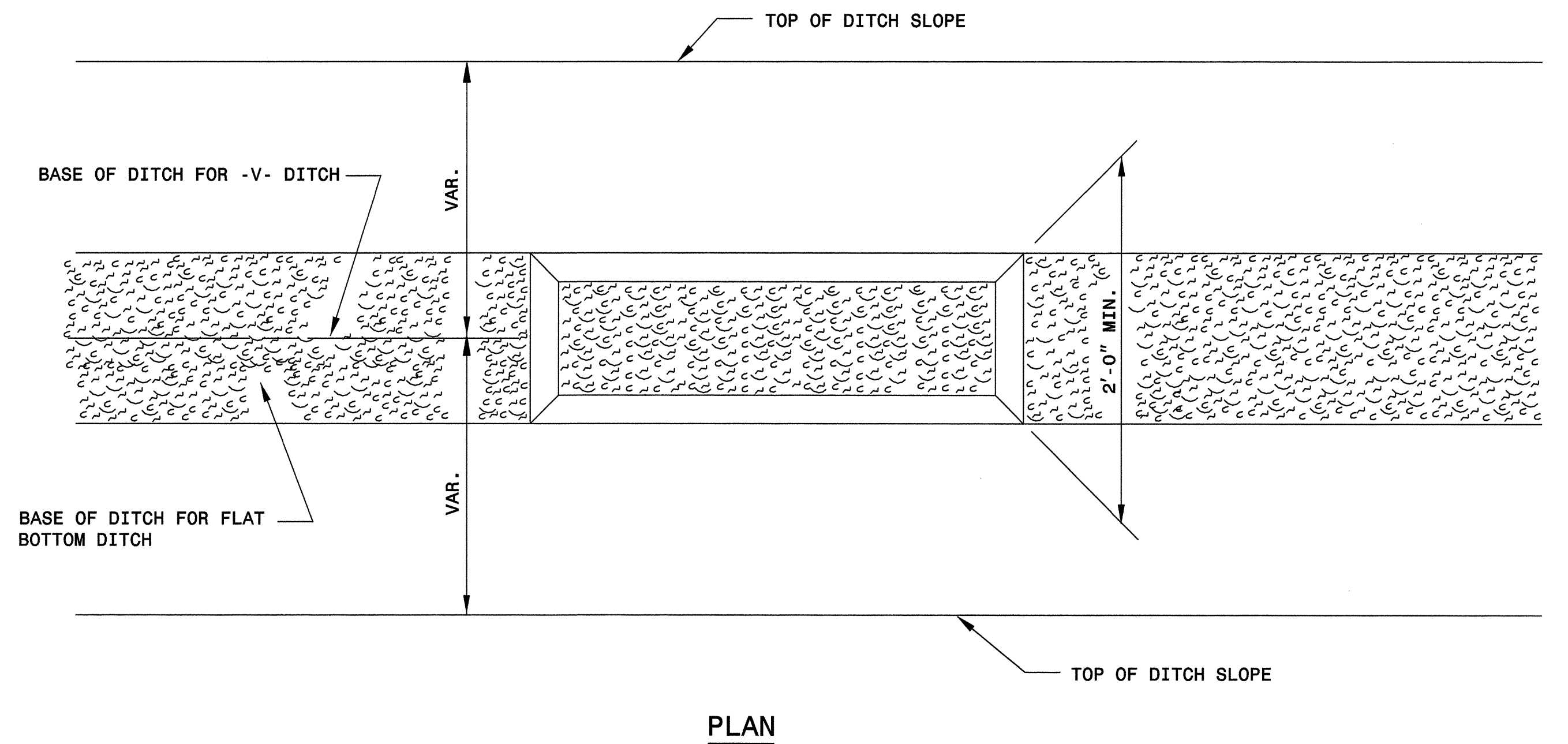
**NOTES:**

USE CLASS 'B' EROSION CONTROL STONE FOR STRUCTURAL STONE.

THE ENGINEER MAY DIRECT THE OPTION OF CLASS "A" STONE FOR SITES HAVING LESS THAN ONE (1) ACRE DRAINAGE AREA AND A DITCH GRADE LESS THAN 3%.



## TEMPORARY SILT BASIN TYPE 'B' DETAIL



# EROSION CONTROL PLAN

REVISIONS

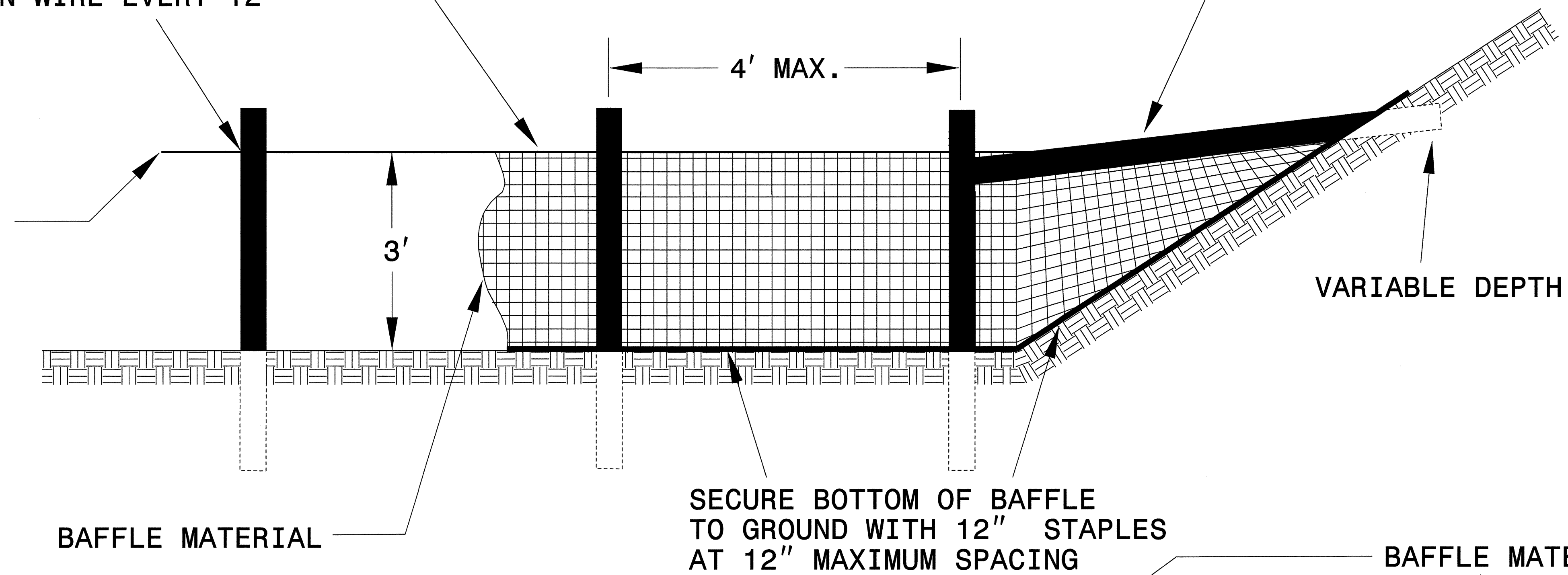
# COIR FIBER BAFFLE DETAIL

PROJECT REFERENCE NO. R-5024	SHEET NO. EC-1B
R/W SHEET NO.	HYDRAULICS ENGINEER
ROADWAY DESIGN ENGINEER	ENGINEER
WILBUR SMITH ASSOCIATES 4135 MENDENHALL OAKS PKWY SUITE 160 HIGH POINT, N. C. 27265	

DRAPe BAFFLE MATERIAL OVER WIRE STRAND AND SECURE WITH PLASTIC TIES AT POSTS AND ON WIRE EVERY 12"

INSTALL T-POST TO ANCHOR BAFFLE TO SIDE OF BASIN AND SECURE TO VERTICAL POST

8 GAUGE MIN WIRE STRAND SHALL BE SECURED TO POST TO SUPPORT BAFFLE MATERIAL



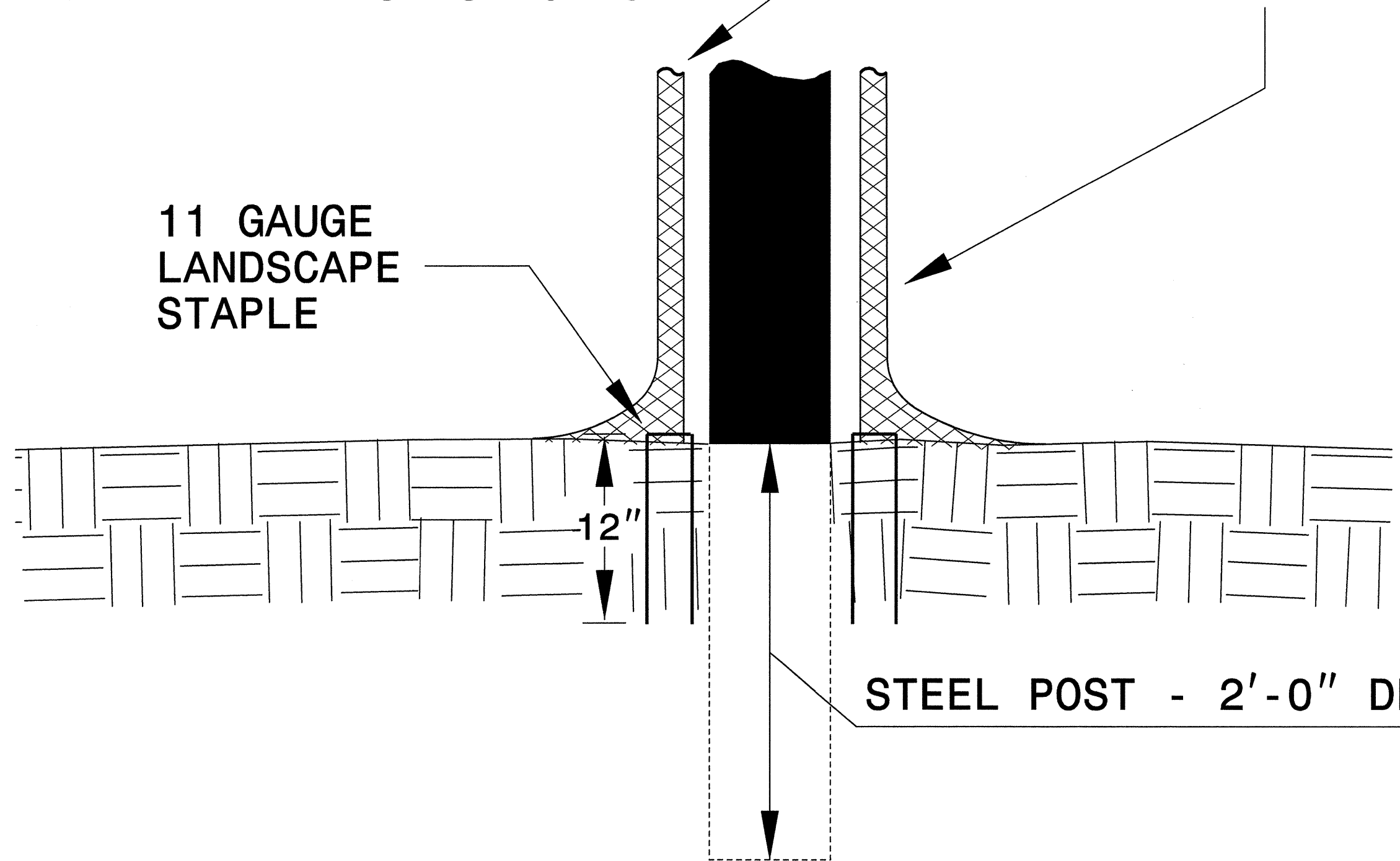
SECURE BOTTOM OF BAFFLE TO GROUND WITH 12" STAPLES AT 12" MAXIMUM SPACING

VARIABLE DEPTH

BAFFLE MATERIAL

BAFFLE MATERIAL

11 GAUGE LANDSCAPE STAPLE



STEEL POST - 2'-0" DEPTH

BAFFLE MATERIAL SHALL BE SECURED TO THE BOTTOM AND SIDES OF BASIN USING 12" LANDSCAPE STAPLES

NOTE: INSTALL THREE(3) COIR FIBER BAFFLES IN SILT BASINS AND SEDIMENT DAMS AT DRAINAGE OUTLETS WITH A SPACING OF 1/4 THE BASIN LENGTH. TWO(2) COIR FIBER BAFFLES CAN BE INSTALLED IN SILT BASINS LESS THAN 20 FT. IN LENGTH WITH A SPACING OF 1/3 THE BASIN LENGTH.

EROSION CONTROL PLAN

REVISIONS

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### EROSION & SEDIMENT CONTROL MEASURES

STD #	DESCRIPTION	SYMBOL
1605.01	Temporary Silt Fence	
1606.01	Special Sediment Control Fence	
1607.01	Gravel Construction Entrance	
1622.01	Temporary Berms and Slope Drains	
	Silt Basin Type B	
1630.03	Temporary Silt Ditch	
1630.05	Temporary Diversion	
1632.03	Rock Inlet Sediment Trap Type C	
1633.01	Temporary Rock Silt Check Type A	
	Temporary Rock Silt Check Type B	
1634.02	Temporary Rock Sediment Dam Type B	
1635.02	Rock Pipe Inlet Sediment Trap Type B	

NOTE: STABILIZE PERIMETER BERM AND TEMPORARY DIVERSION DITCHES WITH PERMANENT AND TEMPORARY LININGS SPECIFIED ON THE PLANS PRIOR TO ANY GRUBBING OR GRADING OPERATIONS WITHIN PROJECT LIMITS.

NOTE: ALL PERIMETER EROSION CONTROL MEASURES AND ROCK PIPE INLET SEDIMENT TRAPS TYPE B & TEMPORARY ROCK SILT CHECKS TYPE A AT EXISTING CULVERTS SHALL BE INSTALLED PRIOR TO ANY GRUBBING OPERATIONS WITHIN PROJECT LIMITS.

DITCH TYPE	LINE	FROM STATION	TO STATION	SIDE	LINING
ROADWAY	-L-	10+40	15+00	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	18+00	18+40	LT	PERMANENT SOIL REINF MAT
ROADWAY	-L-	18+40	19+00	LT	PERMANENT SOIL REINF MAT
ROADWAY	-L-	19+00	19+80	LT	MATTING FOR EROSION CONTROL
LATERAL	-L-	13+58	14+12	RT	MATTING FOR EROSION CONTROL
LATERAL	-L-	19+80	21+80	LT	MATTING FOR EROSION CONTROL
LATERAL	-L-	23+77	26+60	LT	MATTING FOR EROSION CONTROL
BERM	-L-	15+50	16+50	LT	MATTING FOR EROSION CONTROL
BERM	-L-	16+50	18+40	LT	PERMANENT SOIL REINF MAT
TD	-L-	10+47	12+00	LT	PERMANENT SOIL REINF MAT
TD	-L-	12+00	14+00	LT	PERMANENT SOIL REINF MAT
TD	-L-	20+90	22+10	LT	PERMANENT SOIL REINF MAT
TD	-L-	22+10	22+75	LT	MATTING FOR EROSION CONTROL
TSD	-L-	20+86	21+15	LT	MATTING FOR EROSION CONTROL
TSD	-L-	22+47	22+82	LT	MATTING FOR EROSION CONTROL
TD	-L-	23+77	24+57	LT	PERMANENT SOIL REINF MAT

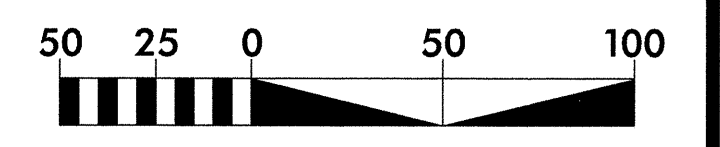
NOTE: SEE PLAN SHEET 4 FOR BERM & LATERAL DITCH DETAILS AND RIP RAP LININGS

NOTE: TEMPORARY STREAM CROSSINGS AND ALL CONSTRUCTION ACTIVITIES ARE STRICTLY PROHIBITED WITHIN COPE CREEK

NOTE: STA 19+17 TO STA 24+80 -L- (LT&RT) - INSTALL SAFETY FENCE

 ENVIRONMENTALLY SENSITIVE AREA  
SEE PROJECT SPECIAL PROVISIONS

# EROSION CONTROL PLAN



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### EROSION & SEDIMENT CONTROL MEASURES

STD #	DESCRIPTION	SYMBOL
I605.01	Temporary Silt Fence	
I606.01	Special Sediment Control Fence	
I607.01	Gravel Construction Entrance	
I622.01	Temporary Berms and Slope Drains	
	Silt Basin Type B	
I630.03	Temporary Silt Ditch	
I630.05	Temporary Diversion	
I632.03	Rock Inlet Sediment Trap Type C	
I633.01	Temporary Rock Silt Check Type A	
	Temporary Rock Silt Check Type B	
I634.02	Temporary Rock Sediment Dam Type B	
I635.02	Rock Pipe Inlet Sediment Trap Type B	

**NOTE:**  
ALL PERIMETER EROSION CONTROL MEASURES AND ROCK PIPE INLET SEDIMENT TRAPS TYPE B & TEMPORARY ROCK SILT CHECKS TYPE A AT EXISTING CULVERTS SHALL BE INSTALLED PRIOR TO ANY GRUBBING OPERATIONS WITHIN PROJECT LIMITS.

**NOTE:** STABILIZE PERIMETER BERM AND TEMPORARY DIVERSION DITCHES WITH PERMANENT AND TEMPORARY LININGS SPECIFIED ON THE PLANS PRIOR TO ANY GRUBBING OR GRADING OPERATIONS WITHIN PROJECT LIMITS.

TRSD-B: 24' X 6' X 2' WITH 2' WEIR  
NOTE: STA 46+00 TO 51+30 LT SHALL BE PERMANENTLY STABILIZED WITHIN 30 CALENDER DAYS FROM BEGIN GRADING

V DITCH W/ 2:1 SLOPES & 1/2' DEPTH (TYP)

2' BASE DITCH W/ 2:1 SLOPES & 1' DEPTH (TYP)

22' x 6' x 2' ID 47

22' x 6' x 2' ID 52

18' x 4' x 2' ID TSD

18' x 4' x 2' ID TSD

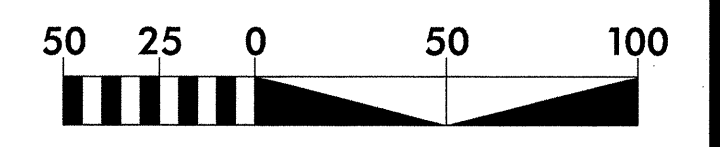
30' x 6' x 2' ID 38

22' x 6' x 4' ID 39

DITCH TYPE	LINE	FROM STATION	TO STATION	SIDE	LINING
ROADWAY	-L-	40+50	42+00	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	42+00	46+50	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	46+50	51+25	LT	PERMANENT SOIL REINF MAT
ROADWAY	-L-	53+25	55+20	RT	PERMANENT SOIL REINF MAT
ROADWAY	-L-	54+09	55+75	LT	PERMANENT SOIL REINF MAT
BERM	-L-	41+50	41+75	LT	MATTING FOR EROSION CONTROL
BERM	-L-	41+75	45+00	LT	MATTING FOR EROSION CONTROL
TD	-L-	45+99	47+00	LT	PERMANENT SOIL REINF MAT
TSD	-L-	51+90	53+55	LT	PERMANENT SOIL REINF MAT

NOTE: SEE PLAN SHEET 6 FOR BERM & LATERAL DITCH DETAILS AND RIP RAP LININGS

# EROSION CONTROL PLAN



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N/F MICHAEL D COOPER  
PIN:7641-98-0364  
DB 984 PG 164

N/F MICHAEL D COOPER  
PIN:7641-97-0898  
DB 440 PG 36

N/F MICHAEL D COOPER  
PIN:7641-97-3583  
DB 984 PG 164

N/F JAMES A SHULER  
PIN:7641-98-2445  
DB 984 PG 57

N/F MARTHA POPPLEWELL  
PIN:7651-06-9587  
DB 0184 PG 0163

N/F JANET WHISNANT & RICHARD P WHISNANT  
PIN:7651-08-0178  
DB 1220 PG 0413

N/F FREDIA H QUEEN  
PIN:7641-98-6498  
DB 094E PG 0226  
(NO CLAIM)

N/F MARY A WILSON  
PIN:7641-98-9568  
DB 645 PG 465

N/F JANET WHISNANT & RICHARD P WHISNANT  
PIN:7651-08-0178  
DB 1220 PG 0413

N/F JOANNE C BRADLEY  
PIN:7651-08-5469  
DB 638 PG 349

N/F THE LEC LIMITED PARTNERSHIP  
PIN:7651-09-1668  
DB 1596 PG 316-317

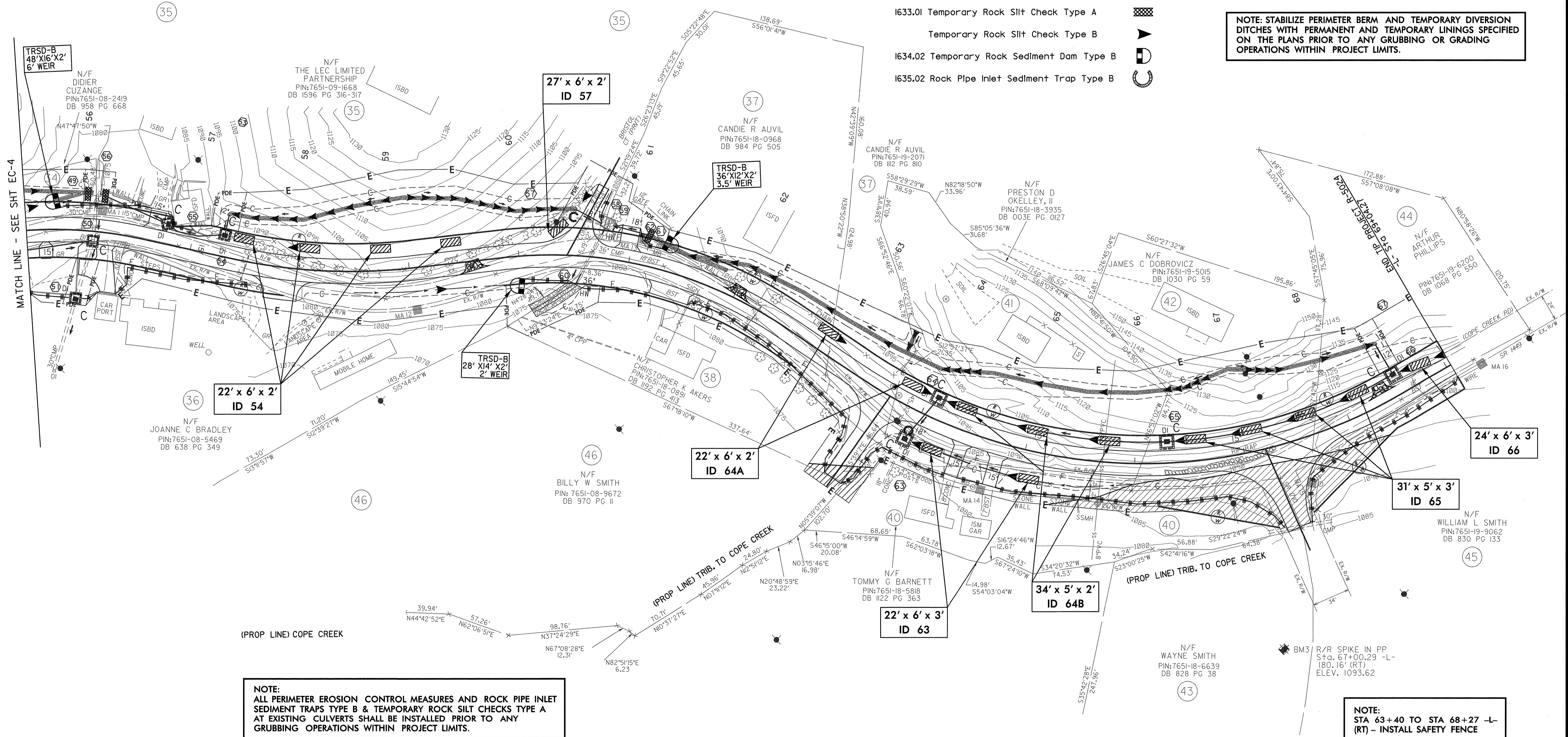
DITCH LINING SUMMARY					
DITCH TYPE	LINE	FROM STATION	TO STATION	SIDE	LINING
ROADWAY	-L-	57+28	60+20	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	60+20	60+60	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	62+00	64+09	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	64+09	66+30	LT	MATTING FOR EROSION CONTROL
ROADWAY	-L-	66+30	68+55	LT	PERMANENT SOIL REINF MAT
LATERAL	-L-	58+50	60+23	RT	MATTING FOR EROSION CONTROL
LATERAL	-L-	63+97	66+50	RT	MATTING FOR EROSION CONTROL

NOTE: SEE PLAN SHEET 7 FOR BERM & LATERAL DITCH DETAILS AND RIP RAP LININGS

### EROSION & SEDIMENT CONTROL MEASURES

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NOTE: STA 63+40 TO STA 68+27 -L- (RT) - INSTALL SAFETY FENCE



# EROSION CONTROL PLAN

REVISIONS

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